APPENDIX C: CATEGORIES

EXPLANATION

References from the Bibliography are listed below by Categories as defined by the Key Words assigned to each reference. These are used to define subjects and topics covered in the references in order to assist in searching or identifying material of interest. In some cases, these words do not appear in the title or abstract of the reference. Since a reference may have multiple Key Words, a reference may be listed under several Categories.

The book or article is identified by the Reference which relates it to the corresponding item in the Bibliography. This is followed by the Title. The Reference consists of the first four letters of the Author, followed by by year, thus: {Name96}.

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LEGEND

Subject Category (KEY WORD)

Reference, Title
References are listed in order first of DATE and within that by AUTHOR

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APPLICATIONS

DeTa91 Lattice QCD in the 1990s
Bowl92 Physics Leads the Way at Edinburgh HPC Facilities
Perr93 Modeling the World's Climate
Bert94 The Stabilization of Quantum Computations
IEEE(a)94 Proceedings of Workshop on Physics and Computation '94
Argo95 Applications and Algorithm Challenges for PetaFlops Computing
Taub96 Redefining the Supercomputer
Feie97 Computational Aerosciences Workshop 96

ALGORITHMS

Argo95 Applications and Algorithm Challenges for PetaFlops Computing

BACKGROUND

Kauf93 Supercomputing and the Transformation of Science
Scie95 The Computer in the 21st Century
Ster95 Enabling Technologies For Petaflops Computing

CHALLENGES *(INCLUDES GRAND)*

FGCS89 Grand Challenges to Computational Science
Wils89 Grand Challenges to Computational Science
Sieg92 Summary of the Report of the NSF-Sponsored Purdue Workshop on Grand Challenges....
Pres94 Looking at the Grand Challenges Computing Requirements

COMMUNICATIONS

DelR94 High-Performance I/O for Massively Parallel Computers

ECONOMICS

Miel92 Supercomputers and CFD (An Industry Perspective)

EXAFLOPS *(SPECIFIC*

(No references found in search)

FORECASTS *(GENERAL)*

Pres(a)90 An Examination of the Role of Parallel Computers in Scientific Supercomputing '91 - '99
Bail92 Future Directions in Computing and CFD
Scie95 The Computer in the 21st Century
Ster95 Enabling Technologies For Petaflops Computing
Stev95 Strategic Applications for PetaFLOPS Computational Systems
Bell96 Next-Generation Compact Discs
Lewi96 The Next 10000_2 Years (ie: 1996 to 2012)

LONG RANGE PLANNING

Gate95 The Road Ahead

MANUFACTURING

Losl90 Semiconductor Manufacturing in the 21st Century: Capital Investment VS Technical Innovation
Thom97 Chip-Scale Manufacturing

PETAFLOPS *(SPECIFIC)*

INCLUDES PETAFLOP *(Search separately on Web)*

NASA95 PetaFLOPS Frontier Workshop
Fost96 The Petaflops Systems Workshops
IEEE(c)96 Frontiers '96
Taub96 Redefining the Supercomputer
Clar97 Breaking the Teraflops Barrier

Ster(a)97 First Workshop on HTMT for Very High Performance Computing
Ster(b)97 Steps to Petaflops Computing: A Hybrid Technology Multithreaded Architecture

PLANS *(SPECIFIC)*

Adel94 Molecular Computations to Combinatorial Problems

REQUIREMENTS

John89 Exploiting Parallelism in Computational Science
Kutl89 Computational Fluid Dynamics - Current Capabilities and Directions for the Future
Pres89 Some Analysis on Supercomputing Future Requirements -- Speed and Memory
Wils89 Grand Challenges to Computational Science
DeTa90 Physics Goals of the US QCD Teraflop Project
Pres(b)90 Impact of Larger Jobs on Output in TeraFLOP Computer ERA
DoE_91 Federal High Performance Computing and Communications Program. Dept. of Energy
Gross92 Modeling Reality
Holz92 The NASA Computational Aerosciences Program – Toward TeraFLOPS Computing
Perr93 Modeling the World's Climate
Taub96 Redefining the Supercomputer

SEMICONDUCTORS

Losl90 Semiconductor Manufacturing in the 21st Century: Capital Investment VS Technical Innovation
Gepp92 Semiconductor Lithography for the Next Millennium
Daga95 Device Fabrication by Scanned Probe Oxidation
Kogg95 Processors-In-Memory (PIM) Chip Architectures for PetaFLOPS Computing
SIA_95 The National Technology Roadmap for Semiconductions
Snow95 AFM Fabrication of Sub-10-Nanometer Metal-Oxide Devices with in Situ Control.....
Stix95 Toward Point One
Zhou95 3-D Simulation of Deep-Submicron Devices
Fost96 The Petaflops Systems Workshops
Guns96 Blue-Laser CD Technology
Hutc96 Technology and Economics in the Semiconductor Industry
Semi96 Solid State - Technology 1996
Gepp97 Solid State
Vand97 When Caches Aren't Enough: Data Prefeteching Techniques
Ster(a)97 First Workshop on HTMT for Very High Performance Computing
Ster(b)97 Steps to Petaflops Computing: A Hybrid Technology Multithreaded Architecture

SOCIAL IMPACT

IEEE(b)96 Special report: Bioelectronic Vision

SOFTWARE

Cann92 Retire Fortran? A Debate Rekindled
Miel92 Supercomputers and CFD (An Industry Perspective)

Gann94 Software Crisis for the Emerging MPP Industry
Vari97 1997 Petaflops Algorithm Workshop (PAL '97)

SUPPORT SYSTEMS & COMPONENTS

Bell96 Next-Generation Compact Discs
Guns96 Blue-Laser CD Technology

TECHNOLOGY

Gepp92 Semiconductor Lithography for the Next Millennium
Birg95 Protein-Based Computers
Cira95 Quantum Computations with Cold Trapped Ions
DiVi95 Quantum Computation
Lloy95 Quantum-Mechanical Computers
Luko95 Taming Massive Parallelism: The Prospects of Opto-Electronic CRCW Shared Memory
Maiz95 Some Applications Demonstrating the Existing Need for Petaflops/PetaOps Computing....
Slea95 Realizable Universal Quantum Logic Gates
Ster95 Enabling Technologies For Petaflops Computing
Fost96 The Petaflops Systems Workshops
IEEE(a)96 Neural Computing
IEEE(b)96 Special report: Bioelectronic Vision
Stix96 Trends in Nanotechnology: Waiting for Breakthroughs
Thom96 When Silicon Hits Its Limits, WHAT'S NEXT?
Vand97 When Caches Aren't Enough: Data Prefeteching Techniques
Feie97 Computational Aerosciences Workshop 96
Ster(a)97 First Workshop on HTMT for Very High Performance Computing
Ster(b)97 Steps to Petaflops Computing: A Hybrid Technology Multithreaded Architecture

TERAFLOPS

Bell92 Ultracomputers: A Teraflop Before Its Time
Busi96 Speed Gets a Whole New Meaning
Fost96 The Petaflops Systems Workshops
LLNL96 Teraflops Computer Announcement (DoE)
Clar97 Breaking the Teraflops Barrier
Ster(a)97 First Workshop on HTMT for Very High Performance Computing
Ster(b)97 Steps to Petaflops Computing: A Hybrid Technology Multithreaded Architecture

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